

**PARTS INFORMATION PROGRAM**  
ELECTRONIC PARTS ENGINEERING OFFICE 507

**FLASH MEMORIES**

PIP No. **340**



DATE: November 8, 1996

**SUBJECT: Commercial Off-The-Shelf (COTS) 2M & 16M Flash Memories In Space Applications**

**SUMMARY:** COTS Flash Memories are being evaluated and currently used in JPL Space Applications. Flash Memories are desirable because they are non-volatile and can be faster and cheaper than DRAMs. Flash Memories offer in-circuit programming, faster design cycles and prototyping, and high density of memory storage.

Flash Memories evaluations are part of JPL's Electronic Parts Engineering Office COTS program, which is charted to look at selected commercial electronic parts for their suitability in space applications. As a part of the continuing series of Flash Memory evaluations, the following reports are now available:

Report 1 - Part Construction Analysis (by JPL) for Intel 16M Part No. DA28F016SV in Plastic Package

Report 2 - Part Construction Analysis (by outside Lab) for Intel 16M Part No. DA28F016SV in Plastic Package

Report 3 - Part Construction Analysis for AMD 2M Part No. AM28F020 in Plastic Package

Report 4 - Part Construction Analysis for CATALYST 2M Part No. CAT28F020P in Plastic Package

Report 5 - Electrical Test Performance for Intel 16M Part No. DA28F016SV in Plastic Package Under Extended Hot & Cold Temperature Ranges (+125°C / -55°C)

Results from the above evaluations including package moisture absorption profiles are being used to make risk assessments against criteria developed for COTS parts. These assessments will also be available when completed.

As part of this series, additional reports on radiation, accelerated stress environments performance, and low voltage capability for the Intel DA28F016SV will be released at a later time.

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